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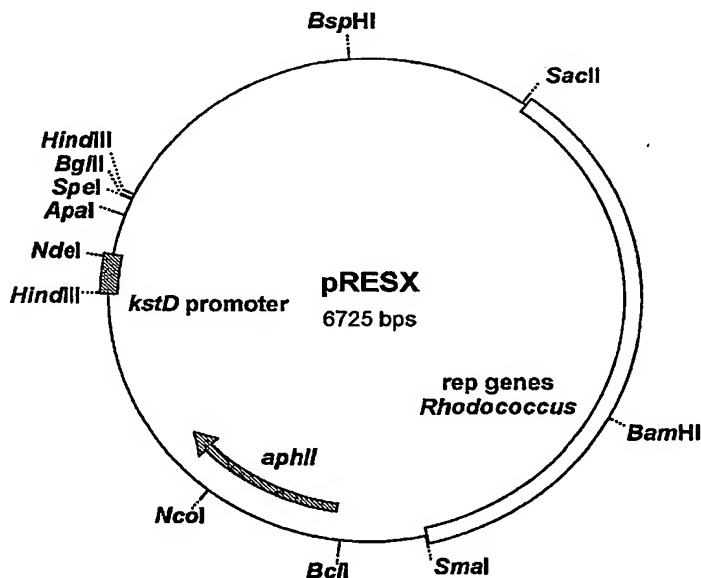
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(54) Title: NEW EXPRESSION SYSTEM FROM RHODOCOCOCCUS



(57) Abstract: Title: The present invention provides an isolated polynucleotide comprising the *kstD* promoter from *Rhodococcus erythropolis*. The polynucleotide can very advantageously be used as a controllable transcription activator. Said controlling function can be provided by providing said isolated polynucleotide with a nucleotide sequence encoding a transcription regulator of said promoter. In the present invention, such a transcription regulator may be externally induced, such as by introduction of steroidal compounds. In an alternative embodiment of the present invention the isolated polynucleotide may comprise the *kstR* gene or a homologue or a functional part thereof as the transcription regulator of the *kstD* promoter.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP 03/50928

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C12N15/76 C12N15/11 C12N1/21 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE, EMBASE, BIOSIS, EMBL, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>VAN DER GEIZE R ET AL: "Targeted Disruption of the <i>kstD</i> Gene Encoding a 3-Ketosteroid delta1-Dehydrogenase Isoenzyme of <i>Rhodococcus erythropolis</i> Strain SQ1"</p> <p>APPLIED AND ENVIRONMENTAL MICROBIOLOGY, WASHINGTON, DC, US, vol. 66, no. 5, May 2000 (2000-05), pages 2029-2036, XP002157019</p> <p>ISSN: 0099-2240</p> <p>cited in the application</p> <p>page 2031, left-hand column, paragraph 2</p> <p>-page 2031, right-hand column, paragraph 1; figure 3</p> <p>page 2035, left-hand column, paragraph 2</p> <p>-&amp; DATABASE EMBL 'Online!</p> <p>DNA, 2398 bp,</p> <p>23 December 1999 (1999-12-23)</p> <p>VAN DER GEIZE R. ET AL: "Rhodococcus</p> <p style="text-align: center;">-/--</p>	1-22

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

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International Application No  
PCT/EP 03/50928

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	<p>erythropolis hypothetical repressor protein KstR (kstR) and 3-ketosteroid dehydrogenase (kstD1) genes, complete cds."</p> <p>retrieved from EBI</p> <p>Database accession no. AF096929</p> <p>XP002232947</p> <p>the whole document</p>	
X	<p>WO 01/31050 A (AKZO NOBEL NV; HESSELS GERDA (NL); DIJKHUIZEN LUBBERT (NL); GEIZE) 3 May 2001 (2001-05-03)</p> <p>cited in the application</p> <p>* SEQ ID N 1 *</p> <p>claim 14; example 1</p>	1-22
A	<p>MOLNAR I ET AL: "Molecular cloning, expression in Streptomyces lividans, and analysis of a gene cluster from Arthrobacter simplex encoding 3-ketosteroid-delta1-dehydrogenase, 3-ketosteroid-delta 5-isomerase and a hypothetical regulatory protein"</p> <p>MOLECULAR MICROBIOLOGY, BLACKWELL SCIENTIFIC, OXFORD, GB,</p> <p>vol. 15, no. 5, March 1995 (1995-03), pages 895-905, XP000926143</p> <p>ISSN: 0950-382X</p> <p>cited in the application</p> <p>page 901, left-hand column, line 8 - line 30; figure 2</p>	
A	<p>KAUFMANN G ET AL.: "Steroid-1-dehydrogenase of Rhodococcus erythropolis: purification and N-terminal amino acid sequence."</p> <p>J STEROID BIOCHEM MOL BIOL,</p> <p>vol. 43, no. 4, 1992, pages 297-301, XP009006809</p>	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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